

# Heng calls for more industry-higher education tie-ups

**Research collaborations can create better jobs in Singapore and power Singapore manufacturing**

**By Annabeth Leow**  
leowhma@sph.com.sg  
@AnnabethLeowBT

Singapore

TIE-UPS between industry and higher education will help research and development (R&D) investments turn into “more good jobs” in Singapore, Deputy Prime Minister Heng Swee Keat said, at the official launch of one such collaboration on Monday.

Chipmaker GlobalFoundries, Nanyang Technological University (NTU) and the National Research Foundation (NRF) jointly pledged S\$120 mil-

lion – in cash and kind – for a four-year project that aims to commercialise a new type of data-storage technology using 12-inch wafers.

It is NTU's largest corporate research deal by dollar value so far, with an undisclosed portion of the funding coming out of the national S\$19 billion Research, Innovation and Enterprise 2020 master plan.

At a ceremony to cement the year-old collaboration, Mr Heng, who is also Minister for Finance and chairman of the NRF, urged more “meaningful partnerships with academia” across the industry landscape.

“Such research partnerships help to retain high-value advanced manufacturing as a core pillar of our economy, as we move towards an innovation-driven future,” said Mr Heng, who also heads the Future Economy Council. “This is one way that our investments in R&D can be translated into more good jobs for our people.”

The latest tie-up involves technology that uses less power to store more digital data in a smaller amount of physical space – with better performance, higher energy efficiency, and lower production costs, to boot. It will bring together about 70 NTU and GlobalFoundries researchers, including postgraduate trainees.

This partnership should yield “a strong pipeline of technical and manufacturing talent, some of whom will become the next generation of tech leaders skilled in future-ready advanced manufacturing”, noted NTU president Subra Suresh at the launch.

With the public-private research tie-up, GlobalFoundries Singapore “will generate a talent pipeline to meet the demand for engineers”, said Ang Kay Chai, its senior vice-president and general manager.

GlobalFoundries has put more than S\$4 billion into its Singapore operations in the last decade and now has an R&D team of about 700 here.

The company, owned by Abu Dhabi state investor Mubadala, was

formed in 2009 through the merger of Advanced Micro Devices’ Germany and New York manufacturing assets, and Singapore’s Chartered Semiconductor Manufacturing.

Mr Heng noted that the merger took place a decade ago, as the semiconductor industry was still reeling from weak demand following the global financial crisis. The acquisition of Chartered was thus “a strong vote of confidence in Singapore, and in the industry’s future”, he said.

Manufacturing contributes to a fifth of Singapore’s economy, with semiconductors making up about a third of that. But the semiconductor cluster, which employed some 34,700 workers last year, has been hit

of late by a double whammy – a global cyclical downturn, and economic uncertainty from trade tensions.

Mr Heng did not allude to the ongoing softness in the sector at the GlobalFoundries event, but he has been reiterating in recent months that Singapore will benefit from longer-term demand for chips, which is still expected to be resilient.

“Stronger partnerships between academia and companies will be key to transforming our semiconductor ecosystem, and the wider manufacturing sector,” he said on Monday.

He added that tie-ups involving higher education, government and the private sector “is how we will continue to grow the industry long-term”.